

# 8412 Non-Paired - Two-Conductor, Low-Impedance Cable





For more information please call 1-800-Belden1

**See Put-ups and Colors** 

### **Description:**

20 AWG stranded (26x34) high-conductivity TC conductors, EPDM rubber insulation, rayon braid, TC braid shield (85% coverage), cotton wrap, EPDM jacket.

### PHYSICAL CHARACTERISTICS:

### **CONDUCTOR:**

| Number of Conductors       | 2                                    |
|----------------------------|--------------------------------------|
| Total Number of Conductors | 2                                    |
| AWG                        | 20                                   |
| Stranding                  | 26x34                                |
| Conductor Diameter         | .037 in.                             |
| Conductor Material         | High Conductivity TC - Tinned Copper |

### INSULATION:

| Insulation Material            | EPDM - Ethylene Propylene Diene Monomer Rubber |
|--------------------------------|--|
| Nom. Insulation Wall Thickness | .023 in.                                       |
| Insulation Diameter            | .083 in.                                       |

### **OVERALL CABLING:**

Overall Cabling Color Code Chart:

| Number | Color | Number | Color |
|--------|-------|--------|-------|
| 1      | White | 2      | Black |

Overall Cabling Separator Material Rayon Braid

### **OUTER SHIELD:**

Outer Shield Type Braid

Outer Shield Material:

| Layer Number | Material Trade Name | Туре  | Material           | % Coverage (%) |
|--------------|---------------------|-------|--------------------|----------------|
| 1            |                     | Braid | Cotton             |                |
| 2            |                     | Braid | TC - Tinned Copper | 85             |

Outer Shield %Coverage 85 %

### **OUTER SHIELD SEPARATOR:**

Outer Shield Separator Material Cotton Wrap

### **OUTER JACKET:**



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| Outer Jacket Material               | EPDM - Ethylene Propylene Diene Monomer Rubber |
|-------------------------------------|--|
| Outer Jacket Nominal Wall Thickness | .035 in.                                       |

### **OVERALL NOMINAL DIAMETER:**

Overall Nominal Diameter .262 in.

### MECHANICAL CHARACTERISTICS:

| Operating Temperature Range      | -50°C To +90°C    |
|----------------------------------|-------------------|
| Non-UL Temperature Rating        | 90°C              |
| Bulk Cable Weight                | 42.8 lbs/1000 ft. |
| Max. Recommended Pulling Tension | 100 lbs.          |
| Min. Bend Radius (Install)       | 2.75 in.          |

## APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

### APPLICABLE STANDARDS:

| EU CE Mark (Y/N)                      | Yes        |
|---------------------------------------|------------|
| EU RoHS Compliant (Y/N)               | Yes        |
| EU RoHS Compliance Date (mm/dd/yyyy): | 01/01/2004 |

### PLENUM/NON-PLENUM:

Plenum (Y/N) N

## **ELECTRICAL CHARACTERISTICS:**

| Nom. Characteristic Impedance                   | 52 Ohms                     |
|---|-----------------------------|
| Nom. Inductance                                 | .18 μH/ft                   |
| Nom. Capacitance Conductor to Conductor @ 1 KHz | 30 pF/ft                    |
| Nom. Cap. Cond. to Other Cond. & Shield @ 1 KHz | 55 pF/ft                    |
| Nom. Conductor DC Resistance @ 20 Deg. C        | 10.2 Ohms/1000 ft           |
| Nominal Outer Shield DC Resistance @ 20 Deg. C  | 3.06 Ohms/1000 ft           |
| Max. Operating Voltage - Non-UL                 | 600 V RMS                   |
| Max. Recommended Current                        | 4 Amps per conductor @ 25°C |

### **PUT-UPS AND COLORS:**

| Item         | Description            | Put-Up (ft.) | Ship Weight (lbs.) | Jacket Color | Notes |
|--------------|------------------------|--------------|--------------------|--------------|-------|
| 8412 0021000 | 2 #20 EPDM BRD<br>EPDM | 1000         | 47                 | RED          | С     |
| 8412 0041000 | 2 #20 EPDM BRD<br>EPDM | 1000         | 47                 | YELLOW       | С     |
| 8412 0061000 | 2 #20 EPDM BRD<br>EPDM | 1000         | 47                 | BLUE, LIGHT  | С     |
| 8412 010100  | 2 #20 EPDM BRD<br>EPDM | 100          | 5.2                | BLACK        |       |
| 8412 0101000 | 2 #20 EPDM BRD<br>EPDM | 1000         | 47                 | BLACK        | С     |
| 8412 010250  | 2 #20 EPDM BRD<br>EPDM | 250          | 12                 | BLACK        |       |



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| 8412 010500   | 2 #20 EPDM BRD<br>EPDM  | 500   | 22   | BLACK | С |
|---------------|-------------------------|-------|------|-------|---|
| 8412 010U1000 | 2 #20 EPDM SHLD<br>EPDM | U1000 | 46   | BLACK |   |
| 8412 010U500  | 2 #20 EPDM SHLD<br>EPDM | U500  | 23.5 | BLACK |   |

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 02-21-2007

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